WHAT IS CLAIMED IS:

1. A process for application of a coating medium on a traveling material web comprising one of paper and cardboard, the coating medium comprising at least one of a pasty medium and a liquid medium, the process comprising:

forming a material web in a wet section of a machine;

guiding the material web while still wet between at least one transfer belt and at least one traveling, endless, air-permeable transfer belt; and

applying a coating medium to the still wet material web,

wherein the applying comprises transferring the coating medium from a roll-coating mechanism through the at least one transfer belt and onto the still wet material web while the at least one transfer belt, the still wet material web, and the at least one traveling, endless, air-permeable transfer belt move in a direction of travel.

2. The process of claim 1, wherein the at least one transfer belt is air-permeable.

3. The process of claim 1, wherein the at least one transfer belt comprises a press felt.

4. The process of claim 1, wherein the at least one transfer belt comprises a screen.

5. The process of claim 1, wherein the at least one traveling, endless, air-permeable transfer belt comprises a screen.

6. The process of claim 1, wherein the guiding occurs in a press section.

7. The process of claim 1, wherein the applying comprises applying the coating medium to only one side of the still wet material web.

8. The process of claim 1, wherein the applying comprises applying the coating medium to two sides of the still wet material web.

9. The process of claim 1, wherein the applying comprises applying the coating medium to the still wet material web prior to a first press in a press section.

10. The process of claim 1, wherein the applying comprises applying the coating medium to the still wet material web after at least one of a first press and a second press in a press section.

11. The process of claim 1, wherein the roll comprises a screen suctioning roll.

12. The process of claim 1, wherein the applying comprises applying the coating medium to at least one side of the still wet material web inside a wet section.

13. The process of claim 1, wherein the applying comprises applying the coating medium to both sides of the still wet material web in a dual-felt press of a press section.

14. The process of claim 1, further comprising applying an additional coating medium at a different location from the applying.

15. The process of claim 1, wherein the material web has a solids content of between about 5 wt% and 50 wt%.

16. The process of claim 1, wherein the material web has a solids content of between about 8 wt% and 17 wt%.

17. The process of claim 1, wherein the coating medium has a solids content of between about 5 wt% and 50 wt%.

18. The process of claim 1, wherein the coating medium has a solids content of between about 10 wt% and 30 wt%.

19. The process of claim 1, further comprising applying an additional coating medium to the material web, wherein a composition of the additional coating medium is different than a composition of the coating medium.

20. A process for application of a coating medium on a traveling material web comprising one of paper and cardboard, the coating medium comprising at least one of a pasty medium and a liquid medium, the process comprising:

forming a material web in a wet section of a machine;

guiding the material web while still wet between at least one transfer belt and a traveling, endless, carrier belt; and

applying with a coating chamber a coating medium under pressure onto the still wet material web through the at least one transfer belt while the at least one transfer belt, the still wet material web, and the at least one traveling, endless, carrier belt move in a direction of travel,

wherein the material web is exposed to the coating medium for an exposure time of between about 1 and 10 milliseconds.

21. The process of claim 20, wherein the at least one traveling, endless, carrier belt is air-permeable.

22. The process of claim 20, wherein the at least one transfer belt comprises a press felt.

23. The process of claim 20, wherein the at least one transfer belt comprises a screen.

24. A process of applying a coating medium on a fully formed but still wet material web, the coating medium being at least one of a fluid and pasty medium having a solids content of between about 5 wt% and 50 wt%, the process comprising:

guiding a material web and at least one screen belt over a roll having a radius between about 200 mm and 1200 mm, wherein the at least one screen belt contacts a circumference of the roll in a belt contact region;

applying, with a coating mechanism, the coating medium under pressure on at least one of a surface of the material web and the circumference of the roll, wherein the coating medium comes into contact with the material web in the belt contact region; and

selecting the pressure such that the coating medium is pressed through the at least one screen belt for a dwell time and in sufficient quantity that the coating medium anchors into the material web but does not penetrate into an interior of the material web.